

**(54) MANUFACTURE OF ELECTROLYTE AND MANUFACTURE OF SECONDARY BATTERY**

**(57)Abstract:**

**PROBLEM TO BE SOLVED:** To provide an electrolyte with high yield that has a long cycle life and contains small impurities by reacting an organic silane compound containing silicon and carbon with a fluorine compound in a solvent containing a nonaqueous solvent as a main constituent.

**SOLUTION:** An electrolyte formed from a salt of an organic fluorine and silicon compound containing silicon, fluorine and carbon elements is produced by reacting an organic silane compound containing at least silicon and carbon elements in a solvent containing a nonaqueous solvent as a main constituent. This electrolyte is placed in the battery housing of a secondary battery. Because the electrolyte hardly absorbs water content by itself, when it is used for a secondary battery, in particular a secondary battery utilizing an intercalation and a deintercalation reaction of lithium ions for charging and discharging, the water content in the electrolyte can easily be controlled with low density. Consequently, the reaction between a metal such as lithium or the like deposited by charge reaction and the water content is suppressed, so that the cycle life of the nonaqueous secondary battery can be prolonged.